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PRESERVING WILD MUSHROOMS

By E. F. PERNOT

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PRESERVING WILD MUSHROOMS.

By E. F. PERNOT.

Western Oregon is naturally well adapted to the growth of wild mushrooms, owing to the warm rains and balmy air of early autumn. In the Willamette Valley there are many pastures, some of which are virgin soil that has been used for grazing many years, and have become ideal wild mushroom beds.

There are many edible varieties, but in this instance only the common pink gilled field mushrooms (*Agaracus campester*) will be dealt with. The value of this highly nutritious and natural food product has been somewhat neglected because many people fear the poisonous varieties, others have not acquired a taste for them, and because those who use them do so only during the growing season, yet they may be easily preserved with all their delicacy of flavor and deliciousness for future use.

The variety which we are dealing with may readily be recognized by a child without fear of obtaining a poisonous one. It first appears in the form of a white ball, or button, connected by a stem which extends into the earth; as it increases in size the cap expands from the lower side and a veil which connects it with the stem is torn, leaving a ragged membrane adhering to the stem: the cap is covered with a rather tough skin which may be peeled off quite readily. The gills vary in color from a delicate pink in the young growth, to a deep brown as they mature, they are not attached to the stem. The stem is white, smooth and brittle, with the lower end somewhat pointed and blunt. When young they are as good to eat as the cap. *No mushrooms having a bulb or cup on the lower end of the stem should be eaten.*

During the past Fall the mushroom season was unusually long and a great abundance of mushrooms of the finest quality were produced. This variety is largely used by mushroom-growers because of its mycelium possessing the power of resisting drought, thus en-

abling it to be sent all over the world in a dessicated condition for spawn.

While the growing of mushrooms is an easy matter requiring but little time and attention, we must not neglect to utilize the abundance which grow wild, requiring only the effort of gathering and preserving them for future use. They may be canned as easily as fruit and much easier than some vegetables. The buttons ranging in size from the smallest to those with the cup breaking from the stem, are most desirable for canning, as they remain firm and white after being heated. When sufficient buttons are gathered they are cleaned by peeling, or by wiping with a cloth, removing any soiled spots or earth which may have adhered to them; the stems are cut off, leaving from one-half to one inch remaining attached to the cap: they may then be placed in a granite iron kettle and heated without water until shrinking ceases, after which they are placed in cans that have previously been cleaned and scalded, and the liquor poured over them completely filling the can.

If glass cans are used, after filling they are placed in any kind of vessel provided with a cover and containing a small amount of hot water. A sheet of asbestos, or a thin layer of excelsior is placed in the boiler to prevent the glass coming in contact with the bottom. The caps are placed loosely on the cans and with steamer cover in place allow the water to simmer for half an hour. Upon removing the cover from the steamer, immediately screw the can covers down as tightly as possible, then place the cans away to cool, upside down, in order to detect any leak. If all are perfectly sealed, allow them to stand until the next day at the same time, when they are again heated in the same manner, except that the time must be prolonged to one hour, because the contents of the cans are cold. Repeat this operation again the third day, which will complete the sterilization, and the mushrooms will be found to be as nearly like the fresh article as it is possible to have them. They keep well and do not deteriorate in consistency nor flavor. The cans must be kept sealed throughout the operation.

If desired the mushrooms may be stewed in milk, or prepared in any manner for the table and then canned in the manner described. When the can is opened they require heating only before serving.

When tin cans are used they are handled in the same manner as the glass ones, with the exception of soldering the lid as soon as the can is filled, leaving the vent open until after heating the first time

when it is immediately closed with a drop of solder while can is hot, thus forming a partial vacuum that takes up the expansion caused by subsequent heatings.

This method of sterilizing kills the vegetative germ cell at the first heating, and the intermission between heatings induces the spores to germinate into cells, thus enabling a much lower temperature to be used than what would be required to kill the spores.

If it is desirable to sterilize the mushrooms at one operation, the cans should be filled as already described and, after sealing, heat them to a temperature of 240 degrees F. for thirty minutes. This, however, requires a steam chest capable of withstanding a pressure of over fifteen pounds to the square inch and is not commonly found in the home, besides the flavor and texture of the article being canned is materially impaired by this high temperature, and glass cans cannot be used.

When the older mushrooms are used for canning they reduce very much in bulk, becoming mushy and turn black after being heated. They do not present such a tempting appearance, but the flavor is not impaired.

A good use to make of the older mushrooms is to dry them. This may be done after they have been peeled or cleaned by placing them upon boards, or drying racks, only one deep, and exposing them to the sun and air. Beginning with the cap side down they should be turned over every day and must not be left out during the night, as they absorb moisture very rapidly. They may also be dried upon wooden trays in a warm room. When dried by either method until they feel dry to the touch, finish them in the oven and while brittle grind them into a fine powder with a spice mill, or even a coffee mill will answer the purpose. The powder should at once be placed into well stoppered, dry bottles or fruit jars well sealed and kept in a warm, dry place. Mushrooms that are wet cannot be successfully dried. The best are those which grow and are gathered dry.

Mushroom powder keeps very well and it is one of the most delicious flavoring condiments of the kitchen. If milk is used in making meat gravy or other dishes, the flavor is much more pronounced.

The mushrooms may also be dried in the manner described, and used whole, by first soaking them before preparing the various dishes; they are practically the same as fresh ones with the excep-

tion of being somewhat tough: the flavor is fully as strong as in fresh ones.

In gathering mushrooms we always have some in different stages of development, the buttons of various sizes may be canned, those with caps fully opened and firm may be dried and used whole or made into powder, while the older ones, those which have been broken, and stems, are made into catsup, so there is nothing wasted.

There are many receipts for making catsup, but the following one we have found very excellent to preserve the flavor, and it keeps well after the bottle is opened.

Take all the mushrooms that cannot be used for canning and drying, or all good ones if desired, place them in an earthen jar and sprinkle salt over them stirring so that all receive the salt; allow them to stand for twelve hours then mash and strain through a cloth: for every quart of the liquid add one-half teaspoonful ground ginger and one-half teaspoonful black pepper. Boil in a granite iron kettle until it is reduced not less than one-third. Prepare the bottles by cleaning and thoroughly boiling them and their corks, then fill to the neck with the hot catsup, cork tightly and when the cork has dried and before they are cold, dip the cork and about half an inch of the bottle neck into hot canning wax, previously melted in a cup or can. It is advisable to use rather small sized bottles so that the contents may be used before remaining open too long.

Some seasons, and under certain weather conditions, mushrooms are infested with insect larvæ, unfitting them for use in any form. They are most always found where the cap joins the stem and can easily be seen by breaking off the stem where they are localized at that point. In later stages they will be found to infest the cap and stem. The buttons are less likely to have them than the more mature fungus.

As a rule during the Fall there are enough wild mushrooms in the Willamette Valley and adjacent foothills to furnish material for quite an industry in preserving them for the market.

What could be more delicious than a tender steak and gravy flavored with mushroom powder or garnished with canned mushrooms?

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